Remarks

Reconsideration of this Application is respectfully requested.

Claims 6-17, 19-21, 23 and 24 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein, claim 27 is sought to be amended and new claims 28-44 are sought to be added. Upon entry of the foregoing amendment, claims 27-44 are pending in the application, with claims 27, 34 and 39 being the independent claims. These changes are believed to introduce no new matter, and their entry is respectfully requested. In addition, it is believed that these amendments will put the case in condition for allowance or better form for consideration on appeal.

Support for the amendment to claim 27 can be found throughout the specification, for example, at page 15, lines 16-21, and page 17, lines 23-24. Support for new claims 28-44 can be found throughout the specification and in the claims as originally filed. In particular, support can be found, for example, in the specification at page 9, line 24 to page 10, line 12; on page 10, line 23 to page 11, line 7; on page 15, lines 16-21; on page 20, lines 23-27; in the Examples, particularly Examples 1 and 2, beginning on page 24, and in claims 1-7, 11, 14, 18 and 22 as originally filed.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Claim Rejections / Objections Withdrawn

The Examiner withdrew the objection to the specification in view of Applicants' amendment. (*See* Office Action, page 2, ¶ 2.) In addition, the Examiner withdrew the rejections of claims 1-5 and 18 under 35 U.S.C. §§ 102(b), 103(a) and 112 in view of Applicants arguments and/or amendments. (*See* Office Action, page 2, ¶¶ 3-6.)

Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-3, 5 and 27 under 35 U.S.C. § 103(a) as allegedly being unpatentable over PCT Publication No. WO 91/08291. (*See* Office Action, page 2, ¶ 7.) Specifically, it is the Examiner's position that

> [t]he WO 91/08291 patent fails to teach fusion proteins between TGFs β and heterologous LAPs. However, it would have been *prima facie* obvious to one of ordinary skill in the art to generate such proteins. One of ordinary skill would have been motivated to do so because WO 91/08291 teaches that LAPs are originally produced fused to TGFβ and that they are interchangeable, and one of ordinary skill would thus expect that a heterologous fusion protein would have the same characteristics as the naturally produced latent form of TGFβ.

(Office Action, page 3, ¶ 7.) Applicants respectfully traverse this rejection as it may apply to the present claims.

To support a *prima facie* case of obviousness, there must be a motivation to combine the art references, there must be a reasonable expectation of success, and the art references must teach or suggest all of the claim limitations. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Applicants submit, and in fact the Examiner has acknowledged, that WO 91/08291 does not teach the claimed invention.

WO 91/08291 discusses the combination of TGF-β LAP with mature TGF-β to form a latent TGF-β. The reference does not disclose, however, a method for providing latency to an interferon or interleukin comprising covalently linking a fusion protein comprising a latency associated peptide and a proteolytic cleavage site with an interferon or interleukin, wherein the fusion protein is heterologous to the interferon or interleukin and wherein the fusion protein is covalently linked to the interferon or interleukin. For example, the reference does not teach methods for providing latency to interferons or interleukins or the addition of a proteolytic cleavage site with the LAP. In addition, as noted by the Examiner, this reference also "fails to teach fusion proteins between TGFs β and heterologous LAPs." (Office Action, page 3, ¶ 7.) As such, Applicants assert that the reference does not teach all of the claimed limitations.

Applicants also note that the mere fact that the cited reference could conceivably be modified to make the claimed invention does not render the resultant modification obvious unless the prior art also suggests the desirability of that specific modification. *See In re Mills*, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); *see also Ex Parte Levengood*, 28 USPQ2d 1300, 1301-1302 (BPAI 1993). Moreover, the teaching or suggestion to make the claimed invention must be found in the prior art and not based on Applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1993). Applicants submit that WO 91/08291 fails to suggest the claimed invention.

In addition, Applicants respectfully disagree with the Examiner's contention that "one of ordinary skill would thus *expect* that a heterologous fusion protein would have the same characteristics as the naturally produced latent form of TGFβ." The cited reference discloses, at most, that one skilled in the art might find it "obvious to try" to produce the

claimed invention. However, whether a particular combination might be "obvious to try" is not a legitimate test of patentability. *See In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987). When "what would have been 'obvious to try' would have been to . . . try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave . . . no direction as to which of many possible choices is likely to be successful," it would not have been obvious to produce the claimed invention. *See In re O'Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).

Applicants further note that claims 25 and 26 were not rejected under 35 U.S.C. § 103(a). Claims 25 and 26 have been cancelled, and new claims 34-44 are directed to similar subject matter. Accordingly, Applicants submit that the § 103(a) rejection is likewise inapplicable to these claims.

Since at least one of the requirements for establishing a *prima facie* case of obviousness has not been met, the present invention is nonobvious over the cited reference. Therefore, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Rejections under 35 U.S.C. § 112, First Paragraph

The Examiner rejected claim 27 under 35 U.S.C. § 112, first paragraph, "because the specification, while enabling for methods using combinations of LAP with cytokines known to be useful for treatment of inflammatory disease, is not enabling for the use of all cytokines as broadly claimed." (Office Action, page 3, ¶ 8.)

Applicants traverse this rejection. Nevertheless, in furtherance of prosecution, Applicants have amended claim 27 to be directed to a method of treating inflammatory

disease in a patient comprising administering a therapeutically effective amount of a fusion protein comprising a latency associated peptide and a proteolytic cleavage site, wherein the fusion protein is covalently linked to *an anti-inflammatory* cytokine and wherein the fusion protein is heterologous to the *anti-inflammatory* cytokine. Since the specification is enabled "for methods using combinations of LAP with cytokines known to be useful for treatment of inflammatory disease," Applicants submit that the rejection has been rendered moot. Accordingly, Applicants respectfully request that the rejection of claim 27 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejections under 35 U.S.C. § 112, Second Paragraph

The Examiner rejected claim 25 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for the recitation of the term "interferon." (*See* Office Action, page 4, ¶ 9.) The Examiner indicated that "that there are many interferons known in the art and the skilled artisan would not know which one was intended. Amendment of the claim to read 'an interferon' would overcome this rejection." (Office Action, page 4, ¶ 9.)

Applicants traverse this rejection. However, solely in an effort to expedite prosecution, claim 25 has been canceled, thereby rendering the basis for this rejection moot. Accordingly, Applicants respectfully request that this rejection be withdrawn. Applicants also note that new claim 34 is directed to a method for providing latency to *an* interferon. As such, Applicants respectfully submit that claim 34 and dependent claims 35-38 are in condition for allowance.

Objections to the Claims

The Examiner objected to claim 26 as being dependent upon a rejected base claim. (*See* Office Action, page 4, ¶ 10.) The Examiner further indicated that this claim would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. (*See id.*)

Applicants note that claim 26 has been canceled, and that new independent claim 39 includes all of the limitations of cancelled base claim 1. As such, Applicants submit that claim 39, as well as dependent claims 40-44, are allowable. Notice to this effect is respectfully requested

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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